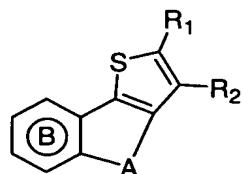


What is claimed is:

1 A compound of formula I

5



I

or isomers, tautomers, polymorphs, carriers, prodrugs, pharmaceutically acceptable salts thereof, wherein;

A is $(CH_2)_m$ or $(CH_2)_m-W-(CH_2)_n$, wherein A is optionally substituted with one or more substituent independently selected from the group consisting of sulfamyl, halo, alkyl, alkoxy, hydroxyl and haloalkyl, CF_3 , $COCF_3$, CN, NO_2 , hydrido, OR^3 , $OCOOR^3$, CO_2H , CO_2R^3 , $CONH_2$, $CONHR^3$, $CON(R^3)_2$, COR^3 , SR^3 , SOR^3 , $SCOOR^3$, SO_2R^3 , NH_2 , NHR^3 , NR^3R^3 , NR^3COR^3 , NR^3CONHR^3 , $NR^3SO_2R^3$, $NR^3SO_2NHR^3$, SO_2NHR^3 , and $SO_2N(R^3)_2$;

B is a 6-membered aromatic hydrocarbon ring, optionally substituted with one or more substituent independently selected from the group consisting of OR^3 , SR^4 , $SO_2N(R^4)_2$, NHR^4 , $NHCOR^4$, NR^4COR^4 , $NHCO(OR^4)$, $NR^4CO(OR^4)$, $NHCONHR^3$, NR^3CONHR^4 , $NR^3SO_2R^4$, $NHSO_2R^4$, $NHSO_2N(R^4)_2$, $NHCONR^4R^4$, CO_2R^4 , $CON(R^4)_2$, aryl, heteroaryl, heterocyclic, halo, alkylthio, alkylsulfinyl, alkylsulfonyl, cyano, carboxyl, alkoxy carbonyl, amido, N-monoalkylamido, N-monoarylamido, alkyl, alkenyl, alkynyl, N,N-dialkylamido, N-alkyl-N-arylamido, haloalkyl hydrido, hydroxyl, alkoxy, hydroxyalkyl, haloalkoxy, sulfamyl, N-alkylsulfamyl, amino, alkylamino, and nitro;

30

W is S(O)p, O, CH=N, N(O)=CH, and NR⁴;

m is 0 to 3, inclusive;

n is 0 to 3, inclusive;

p is 0 to 2, inclusive;

5

R¹ and R² are independently selected from the group consisting of : hydrido, cyano, nitro, hydroxyl, alkyl, hydroxyalkyl, haloalkyl, alkoxy, haloalkoxy, amidine, guanidine, CONHR⁵, NHR⁵, and NHCXNHR⁵, wherein X is O, S, or NR⁶;

10

R³ is selected from the group consisting of: hydrido, aryl, heteroaryl, lower alkyl, alkenyl, alkynyl, and heteroalkyl;

15

R⁴ is selected from the group consisting of: lower alkyl, aryl, heteroaryl, arylalkyl, heteroalkyl, haloalkyl, arylalkylamino, and heteroarylalkyl, wherein aryl, arylalkyl, heteroaryl, or heteroarylalkyl are optionally substituted with one or more radical selected from alkyl, alkoxy, halo, haloalkyl, cyano, haloalkoxy, acyl, carboxyl, hydroxy, hydroxyalkyloxy, phenoxy, benzyloxy, dialkylaminoalkyloxy, and heterocyclic;

20

R⁵ is selected from the group consisting of: hydrido, alkyl, aminoalkyl, hydroxyalkyl, haloalkyl, and acyl;

25

R⁶ is selected from the group consisting of: hydrido, alkyl, cyano, and nitro.

With the proviso, when W is CH=N and m is 0, the nitrogen atom in CH=N has to be directly attached to the ring B.

2 The compound of claim 1, wherein A is (CH₂)₂.

30

3 The compound of claim 1, wherein A is (CH₂)₃.

4 The compound of claim 2 or 3, wherein R¹ is NHR⁵.

5 The compound of claim 4, wherein R¹ is NHCOCH₃.

6 The compound of claim 4 wherein R¹ is NHCONHR⁵.

5

7 The compound of claim 6 wherein R¹ is NHCONH₂.

8 The compound of claim 2 or 3, wherein R² is CONHR⁵.

10 9 The compound of claim 8 wherein R² is CONH₂.

10 The compound of claim 8 wherein R¹ is NHCOCH₃ or NHCONH₂.

11 The compound of claim 1 selected from the group consisting of:

15

3-amino-4,5-dihydronaphtho[1,2-b]thiophene-2-carboxamide,

3-amino-8-methoxy-4,5-dihydronaphtho[1,2-b]thiophene-2-

carboxamide,

3-[(2-aminoethyl)amino]-4,5-dihydronaphtho[1,2-b]thiophene-2-

carboxamide hydrobromide,

3-[(3-aminopropyl)amino]-4,5-dihydronaphtho[1,2-b]thiophene-2-

carboxamide hydrochloride,

3-[(aminocarbonyl)amino]-4,5-dihydronaphtho[1,2-b]thiophene-2-

carboxamide,

25 2-amino-4,5-dihydronaphtho[1,2-b]thiophene-3-carbonitrile,

2-(acetylamino)-4,5-dihydronaphtho[1,2-b]thiophene-3-

carboxamide, and

2-[(aminocarbonyl)amino]-4,5-dihydronaphtho[1,2-b]thiophene-3-

carboxamide.

30

12 The compound of claim 1 selected from the group consisting of:

2-[(aminocarbonyl)amino]-7-methoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6-methoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

5 2-[(aminocarbonyl)amino]-6,7-dimethoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-isopropyl-8-methoxy-4,5-dihydro-naphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-4,4-dimethyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

10 2-[(aminocarbonyl)amino]-4-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-fluoro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

15 2-[(aminocarbonyl)amino]-8-fluoro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-4-ethyl-4-methyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-4,4-diethyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

20 2-[(aminocarbonyl)amino]-8-methoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-9-methoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

25 2-[(aminocarbonyl)amino]-7-methoxy-5,5-dimethyl-4,5-dihydro-naphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-9-ethoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7,8-dimethoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

30 2-[(aminocarbonyl)amino]-6,9-dimethoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6-methyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-9-methyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

5 2-[(aminocarbonyl)amino]-7-methyl-4,5-dihydroronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-8-methyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

10 2-[(aminocarbonyl)amino]-7,9-dimethoxy-4,5-dihydroronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6,7-dimethyl-4,5-dihydroronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-ethyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

15 2-[(aminocarbonyl)amino]-7,8-dimethyl-4,5-dihydroronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-tert-butyl-4,5-dihydroronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-propyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

20 2-[(aminocarbonyl)amino]-6-ethoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-butyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

25 2-[(aminocarbonyl)amino]-9-propoxy-4,5-dihydroronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-9-isopropoxy-4,5-dihydroronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-9-butoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

30 2-[(aminocarbonyl)amino]-9-isobutoxy-4,5-dihydroronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-9-sec-butoxy-4,5-dihydronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-methoxy-6-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

5 2-[(aminocarbonyl)amino]-8-methoxy-9-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6-isopropyl-8-methoxy-9-methyl-4,5-dihydro-naphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-isopropyl-6-methoxy-4,5-dihydro-naphtho[1,2-b]thiophene-3-carboxamide,

10 2-[(aminocarbonyl)amino]-7-isopropyl-4,5-dihydronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-bromo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

15 2-[(aminocarbonyl)amino]-5,5,8-trimethyl-4,5-dihydronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6-chloro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-chloro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

20 2-[(aminocarbonyl)amino]-8-chloro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6,8-dichloro-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

25 2-[(aminocarbonyl)amino]-7,8-dichloro-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-5,5-dimethyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)-mino]-4,5,5-trimethyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

30 2-[(aminocarbonyl)amino]-8-hexyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

6-(acetylamino)-2-[(aminocarbonyl)amino]-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-9-bromo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

5 2-[(aminocarbonyl)amino]-6-fluoro-9-methoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-4-ethyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6,9-dimethyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

10 2-[(aminocarbonyl)-mino]-7-ethoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-propoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

15 2-[(aminocarbonyl)amino]-8-ethoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-5-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-hydroxy-8-methoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

20 2-[(aminocarbonyl)amino]-8-nitro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6,8-dimethoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

25 2-[(aminocarbonyl)amino]-6-fluoro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-9-fluoro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6-methoxy-4-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

30 2-[(aminocarbonyl)amino]-8-methoxy-4-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6-chloro-7-methoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-8-(hydroxy-methyl)-7-methoxy-4,5-dihydro-naphtho[1,2-b]thiophene-3-carboxamide,

5 2-[(aminocarbonyl)amino]-6-bromo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6-iodo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

10 2-[(aminocarbonyl)amino]-8-bromo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-8-iodo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

15 2-[(aminocarbonyl)amino]-6,8-dimethyl-4,5-dihydronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6-(methylthio)-4,5-dihydronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6-(methyl-sulfonyl)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

20 2-[(aminocarbonyl)amino]-8-ethynyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-8-chloro-5-methyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-8-(methylthio)-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

25 2-[(aminocarbonyl)amino]-8-(methyl-sulfonyl)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-chloro-5-methyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-8-(ethylthio)-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

30 2-[(aminocarbonyl)amino]-8-(ethyl-sulfonyl)-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6-chloro-5-methyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6-(ethylthio)-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

5 2-[(aminocarbonyl)amino]-6-(ethyl-sulfonyl)-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-9-chloro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

10 2-[(aminocarbonyl)amino]-9-methoxy-4,4-dimethyl-4,5-dihydronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-8-methoxy-7-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-methoxy-8-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

15 2-[(aminocarbonyl)-amino]-6-methoxy-7-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)-amino]-9-methoxy-4-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)-amino]-6,7-diethoxy-4,5-dihydronaphtho[-1,2-b]-thiophene-3-carboxamide,

20 2-[(aminocarbonyl)-amino]-8-ethyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)-amino]-8-isopropyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

25 2-[(aminocarbonyl)-amino]-7,9-dimethyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)-amino]-8-tert-butyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)-amino]-7-methoxy-9-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

30 2-[(aminocarbonyl)-amino]-6,8-difluoro-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)-amino]-7-isopropoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)-amino]-6-chloro-9-methoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

5 2-[(aminocarbonyl)amino]-7,9-dichloro-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-8-(trifluoro-methyl)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-9-methoxy-6-(methylthio)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

10 2-[(aminocarbonyl)amino]-9-methoxy-6-(methylsulfonyl)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-6-ethoxy-9-methoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

15 2-[(aminocarbonyl)amino]-6,9-diethoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-8,9-dimethyl-4,5-dihydronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7,8-dinitro-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

20 2-[(aminocarbonyl)amino]-7-nitro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-8-methoxy-4,7-dimethyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

25 2-[(aminocarbonyl)amino]-6-methoxy-5-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-iodo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-7-chloro-8-nitro-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

30 2-[(aminocarbonyl)amino]-5,8-dimethyl-4,5-dihydronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-5-ethyl-8-methyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

benzyl 3-(aminocarbonyl)-2-[(amino-carbonyl)amino]-4,5-dihydronaphtho-[1,2-b]thien-8-ylcarbamate,

5 8-amino-2-[(aminocarbonyl)amino]-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

 8-(acetylamino)-2-[(aminocarbonyl)amino]-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

10 2-[(aminocarbonyl)amino]-5-isopropyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

 2-[(aminocarbonyl)amino]-6,9-dichloro-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

 2-[(aminocarbonyl)amino]-9-tert-butyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

15 2-[(aminocarbonyl)amino]-5,5,7-trimethyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

 2-[(aminocarbonyl)amino]-5-butyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

20 2-[(aminocarbonyl)amino]-5-butyl-7-methyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

 2-[(aminocarbonyl)amino]-5-butyl-7-fluoro-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

 2-[(aminocarbonyl)amino]-5-butyl-7-methoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

25 2-[(aminocarbonyl)amino]-5-butyl-7,8-dimethoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

 2-(acetylamino)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

 2-(acetylamino)-7-methoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

30 2-(acetylamino)-6-methoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

 2-(acetylamino)-6,7-dimethoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7-isopropyl-8-methoxy-4,5-dihydronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-4,4-dimethyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

5 2-(acetylamino)-4-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7-fluoro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

10 2-(acetylamino)-8-fluoro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-4-ethyl-4-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-4,4-diethyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

15 2-(acetylamino)-8-methoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-9-methoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7-methoxy-5,5-dimethyl-4,5-dihydronaphtho-[1,2-b]-thiophene-3-carboxamide,

20 2-(acetylamino)-9-ethoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7,8-dimethoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

25 2-(acetylamino)-6,9-dimethoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-6-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-9-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

30 2-(acetylamino)-7-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-8-methyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide
2-(acetylamino)-7,9-dimethoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
5 2-(acetylamino)-6,7-dimethyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-7-ethyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-7,8-dimethyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
10 2-(acetylamino)-7-tert-butyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-7-propyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
15 2-(acetylamino)-6-ethoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-7-butyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-9-propoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
20 2-(acetylamino)-9-isopropoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-9-butoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
25 2-(acetylamino)-9-isobutoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-9-sec-butoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-7-methoxy-6-methyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,
30 2-(acetylamino)-8-methoxy-9-methyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-6-isopropyl-8-methoxy-9-methyl-4,5-dihydronaphtho-[1,2b]thiophene-3-carboxamide,

2-(acetylamino)-7-isopropyl-6-methoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

5 2-(acetylamino)-7-isopropyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7-bromo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

10 2-(acetylamino)-5,5,8-trimethyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-6-chloro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7-chloro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

15 2-(acetylamino)-8-chloro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-6,8-dichloro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7,8-dichloro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

20 2-(acetylamino)-5,5-dimethyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-4,5,5-trimethyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

25 2-(acetylamino)-8-hexyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2,6-bis(acetylamino)-4,5-dihydronaphtho-[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-9-bromo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

30 2-(acetylamino)-6-fluoro-9-methoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-4-ethyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-6,9-dimethyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7-ethoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

5 2-(acetylamino)-7-propoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-8-ethoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

10 2-(acetylamino)-5-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7-hydroxy-8-methoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-8-nitro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

15 2-(acetylamino)-6,8-dimethoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-6-fluoro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-9-fluoro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

20 2-(acetylamino)-6-methoxy-4-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide

2-(acetylamino)-8-methoxy-4-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

25 2-(acetylamino)-6-chloro-7-methoxy-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-8-(hydroxymethyl)-7-methoxy-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-6-bromo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

30 2-(acetylamino)-6-iodo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-8-bromo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-8-iodo-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
5 2-(acetylamino)-6,8-dimethyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-6-(methylthio)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
10 2-(acetylamino)-6-(methylsulfonyl)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-8-ethynyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-8-chloro-5-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
15 2-(acetylamino)-8-(methylthio)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-8-(methylsulfonyl)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-8-(ethylthio)-4,5-dihydronaphtho[1,2b]thiophene-3-carboxamide,
20 2-(acetylamino)-8-(ethylsulfonyl)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-6-chloro-5-methyl-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
25 2-(acetylamino)-6-(ethylthio)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-6-(ethylsulfonyl)-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
2-(acetylamino)-9-chloro-4,5-dihydronaphtho[1,2-b]thiophene-3-carboxamide,
30 2-(acetylamino)-9-methoxy-4,4-dimethyl-4,5-dihydronaphtho[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-8-methoxy-7-methyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7-methoxy-8-methyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

5 2-(acetylamino)-6-methoxy-7-methyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-9-methoxy-4-methyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-6,7-diethoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

10 2-(acetylamino)-8-ethyl-4,5-dihydro-naphtho[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-8-isopropyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

15 2-(acetylamino)-7,9-dimethyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide

2-(acetylamino)-8-tert-butyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7-methoxy-9-methyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

20 2-(acetylamino)-6,8-difluoro-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7-isopropoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

25 2-(acetylamino)-6-chloro-9-methoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7,9-dichloro-4,5-dihydroronaphtho[1,2-b-thiophene-3-carboxamide,

2-(acetylamino)-8-(trifluoromethyl)-4,5-dihydroronaphtho[1,2-b] thiophene-3-carboxamide,

30 2-(acetylamino)-9-methoxy-6-(methylthio)-4,5-dihydroronaphtho[1,2-b] -thiophene-3-carboxamide,

2-(acetylamino)-9-methoxy-6-(methyl-sulfonyl)-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-6-ethoxy-9-methoxy-4,5-dihydroneaphtho-[1,2-b]thiophene-3-carboxamide,

5 2-(acetylamino)-6,9-diethoxy-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-8,9-dimethyl-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

10 2-(acetylamino)-7,8-dinitro-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7-nitro-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

15 2-(acetylamino)-8-methoxy-4,7-dimethyl-4,5-dihydroneaphtho[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-6-methoxy-5-methyl-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-7-iodo-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

20 2-(acetylamino)-7-chloro-8-nitro-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-5,8-dimethyl-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-5-ethyl-8-methyl-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

25 benzyl 2-(acetyl-amino)-3-(amino-carbonyl)-4,5-dihydroneaphtho[1,2-b]-thien-8-ylcarbamate,

2-(acetylamino)-8-amino-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

2,8-bis(acetylamino)-4,5-dihydroneaphtho-[1,2-b]thiophene-3-carboxamide,

30 2-(acetylamino)-5-isopropyl-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-6,9-dichloro-4,5-dihydroneaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-9-tert-butyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-5,5,7-trimethyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

5 2-(acetylamino)-5-butyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-5-butyl-7-methyl-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

10 2-(acetylamino)-5-butyl-7-fluoro-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-5-butyl-7-methoxy-4,5-dihydroronaphtho[1,2-b]thiophene-3-carboxamide,

15 2-(acetylamino)-5-butyl-7,8-dimethoxy-4,5-dihydroronaphtho-[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-5,6-dihydro-4H-benzo-[6,7]-cyclohepta[1,2-b]thiophene-3-carboxamide,

20 2-(acetylamino)-9-chloro-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-8,9-dichloro-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

25 2-(acetylamino)-8-methoxy-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-9-methoxy-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-8,10-dimethoxy-5,6-dihydro-4H-benzo[6,7]cyclohepta-[1,2-b]thiophene-3-carboxamide,

30 2-(acetylamino)-8-methyl-5,6-dihydro-4H-benzo-[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-8,9-dimethoxy-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-8-fluoro-9-methoxy-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-7-methoxy-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

5 2-(acetylamino)-6,9-dimethyl-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-10-methoxy-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-9-bromo-6-methyl-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]thiophene-3-carboxamide,

10 2-(acetylamino)-7,8-dimethoxy-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]thiophene-3-carboxamide,

2-(acetylamino)-6-methyl-5,6-dihydro-4H-benzo-[6,7]cyclohepta-[1,2-b]-thiophene-3-carboxamide,

15 2-(acetylamino)-9-chloro-6-methyl-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-9-fluoro-5,6-dihydro-4H-benzo-[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-9-methyl-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

20 2-(acetylamino)-9-amino-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

2-(acetylamino)-9-nitro-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

25 2-(acetylamino)-9,10-dimethoxy-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]-thiophene-3-carboxamide,

30 2-[(aminocarbonyl)amino]-9-chloro-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-8,9-dichloro-5,6-dihydro-4H-benzo[6,7]-cyclohepta[1,2-b]thiophene-3-carboxamide,

2-[(aminocarbonyl)amino]-8-methoxy-5,6-dihydro-4H-benzo[6,7]-cyclohepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-8-methoxy-6,6-dimethyl-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]thiophene-3-carboxamide,
5 2-[(aminocarbonyl)amino]-9-methoxy-5,6-dihydro-4H-benzo[6,7]-cyclohepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-8,10-dimethoxy-5,6-dihydro-4H-benzo-[6,7]cyclohepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-8-methyl-5,6-dihydro-4H-benzo[6,7]-
10 cyclohepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-8,9-dimethoxy-5,6-dihydro-4H-benzo[6,7]-cyclohepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-8-fluoro-9-methoxy-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]thiophene-3-carboxamide,
15 2-[(aminocarbonyl)amino]-7-methoxy-5,6-dihydro-4H-benzo[6,7]-cyclohepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-6,9-dimethyl-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-10-methoxy-5,6-dihydro-4H-benzo[6,7]-cyclo-
20 hepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-9-bromo-6-methyl-5,6-dihydro-4H-benzo[6,7]cyclohepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-7,8-dimethoxy-5,6-dihydro-4H-benzo-[6,7]cyclohepta[1,2-b]thiophene-3-carboxamide,
25 2-[(aminocarbonyl)amino]-6-methyl-5,6-dihydro-4H-benzo[6,7]-cyclohepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-9-chloro-6-methyl-5,6-dihydro-4H-benzo-[6,7]cyclohepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-9-fluoro-5,6-dihydro-4H-benzo[6,7]-
30 cyclohepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-9-methyl-5,6-dihydro-4H-benzo[6,7]-cyclohepta[1,2-b]thiophene-3-carboxamide,

9-amino-2-[(aminocarbonyl)amino]-5,6-dihydro-4H-benzo-[6,7]-cyclohepta[1,2-b]thiophene-3-carboxamide,
2-[(aminocarbonyl)amino]-9-nitro-5,6-dihydro-4H-benzo[6,7]-cyclohepta[1,2-b]thiophene-3-carboxamide, and
5 2-[(aminocarbonyl)amino]-9,10-dimethoxy-5,6-dihydro-4H-benzo[6,7]-cyclohepta[1,2-b]thiophene-3-carboxamide.

13 A composition comprising the compound of claim 1, 2, 3, 11, or 12, and at least one pharmaceutically acceptable carrier.
10

14 A method of treating cancer, inflammation or an inflammation associated disorder in a subject, said method comprising administering to the subject having or susceptible to such cancer, inflammation or inflammation associated disorder, a therapeutically-effective amount of a compound of
15 claim 1, 2, 3, 11, or 12.

15 The method of claim 14 for use in the treatment of cancer.
16 The method of claim 14 for use in the treatment of inflammation.
20

17 The method of claim 14 for use in the treatment of an inflammation-associated disorder.
18 The method of claim 17 wherein the inflammation-associated disorder is
25 arthritis.
19 The method of claim 17 wherein the inflammation-associated disorder is pain
30 20 The method of claim 17 wherein the inflammation-associated disorder is fever.

- 21 The method of claim 17 wherein the inflammation-associated disorder is asthma.

- 22 The method of claim 17 wherein the inflammation-associated disorder is inflammatory bowel disease.
5